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Period 5

Do #'s 11-14, 17-19, 21, 23, 24, 26, 27, 31

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11. Atoms are the building blocks of life. Elements are pure substances that make up an atom. Compounds are substances formed by 2 or more elements in definite proportions. Elements are the characteristics of atoms and atoms make up compounds.

12. A radioactive isotope has nuclei that is unstable and breaks down at a constant rate over time. Radioactive isotopes can be used to date objects and x-ray bones.

13. Atoms in a compound are held together by chemical bonds.

14. A single covalent bond is when an atom is sharing one pair of electrons. A double covalent bond is when they share two pairs of electrons and a triple covalent bond is when they share three pairs of electrons.

17. Cohesion is the attraction of molecules of the same substance. Adhesion is the attraction of molecules with different molecules of different substances.

18. A solvent is what the solute dissolves into making a solution. Like water is a solvent and table salt is a solute and when dissolved makes a solution of salty water.

19. Acids have more hydrogen than hydroxide and bases have more hydroxide than hydrogen.

21. When a person has to much acid in their stomach, they take an antacid tablet which helps the stomach ache. This works because the tablet is made up of magnesium **hydroxide** which is a base and helps balance out the acid in the stomach.

23. Proteins control the rate of reactions, regulate cell processes, and form important cellular structures.

24. Nucleotides are made up of a 5 carbon sugar, phosphate group, and a nitrogen base.

26. Carbohydrate indicates that it is made up of carbon and hydrogen.

27. Two types of energy changes that can occur in a chemical reaction is energy can be released or energy can be absorbed.

31. Enzymes work best at certain ph values and ionic conditions. If temperature rises, the ph can change and therefore the enzyme won’t be as effective.